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SMX 3093.6 (2001-006R1)  
PATENT

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NOV 02 2004 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT & TRADEMARK OFFICE  
Application of Gerrit Klaerner et al.  
Serial No. 10/043,394  
Filed January 10, 2002  
Confirmation No. 4664

Art Unit 1641

For POLYMER BRUSHES FOR IMMOBILIZING MOLECULES TO A  
SURFACE OR SUBSTRATE HAVING IMPROVED STABILITY

Examiner Mary Ceperley

November 2, 2004

**RESPONSE TO RESTRICTION AND  
ELECTION OF SPECIES REQUIREMENTS**

TO THE ASSISTANT COMMISSIONER FOR PATENTS,

SIR:

In response to the Office action of October 6, 2004, wherein a Restriction was required under 35 U.S.C. §§ 121 as between five (5) groups of claims, Applicants hereby elect to prosecute the claims of Group III (i.e., claims 49-69 and 102-110), and to cancel the claims of Group I, II, IV and V (i.e., claims 1-48 and 70-101) without prejudice. Applicants hereby reserve the right to file one or more divisional applications directed to the non-elected claims during the pendency of this application.

Furthermore, in response to the Election of Species requirement, Applicants hereby elect, to the extent necessary, the following for initial examination:

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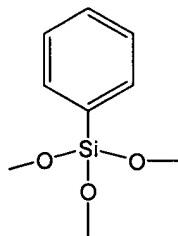
Species 1: The "substrate surface" is silica glass (see, e.g.,  
page 74, lines 20-28).

Species 2: The hydrophobic "layer" is styrene and the hydrophilic "layer" is dimethylacrylamide (see, e.g., Example 25).

Species 3: The "probe" is a nucleic acid (see, e.g., page 71, lines 17-22 and page 81, lines 10-25).

Species 4: The "molecule" is a DNA molecule (see, e.g., page 82, lines 15-25).

Species 5: When the hydrophobic layer is styrene, exemplary initiator and spacer (or dummy) molecules are illustrated in Example 25 (the "spacer" having the following structure, wherein the bonds extending from each oxygen atom are attached to the substrate surface):



Claims reading on the elected species include claims 49-69 and 102-110.

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## CONCLUSION

Please charge any fees required pursuant to 37 C.F.R. §1.17 to Deposit Account No. 19-1345.

Respectfully submitted,



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